

Pearson Higher Nationals in

Construction and the Built Environment

PEARSON-SET THEME & TOPIC RELEASE

UNIT: 1 Individual Project - Theme and Topic Release 2019

For use with the Higher National Certificate and Higher National Diploma in Construction and the Built Environment First teaching from September 2018 Applies to the delivery of the unit: 1st September 2019 - 31st August 2020





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1.1 Introduction to theme

The Pearson-set theme for use with Unit 1: Individual Project is

Managing Risk in Modern Construction

All industries, whether manufacturing or service-related, carry some element of risk. Construction, involving diverse materials, equipment and processes, has been one of the most high-risk industries. Changes in legislation and processes, in recent time, have reduced the number of injuries and death in construction-related accidents.

While the general improvements in managing health and safety, thereby reducing some risk, have helped to make construction safer there continue to be challenges. There is a need to manage and mitigate risk throughout the design, construction and operational phases of construction. In addition, the role of technology has created new areas of risk that must be recognised and managed.

As one of the largest global employment sectors, construction involves many individuals and organisations undertaking different roles throughout the lifecycle of a construction project. Risk is both an individual and an organisational issue that must be addressed in different ways.

This unit will enable students to consider the types of risk that are present within modern construction and explore methods of assessing, managing and mitigating those risks. Through engagement with the theme and topics, students will have the opportunity to undertake work that will embed the knowledge and skills necessary to manage a project.

1.2 Topic Selection

Tutors must choose *one* topic from the list provided below and decide which type of project is most suitable for their assignment. All students must complete the same topic and project chosen by the tutor. However, if delivering to different cohorts of students then tutors may select a different topic and design a different assignment for each cohort.

The Pearson-set Assignment Guidance document for Unit 1: Individual Project, provides additional support and guidance for both tutors and students

Theme: Managing Risk in Modern Construction

Topics:

- 1. Minimising risk through design and specification
- 2. Material selection and risk
- 3. Mitigating error and risk
- 4. Managing risk in site operations

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1.3 Choosing a project type

You will need to devise a brief for the student to follow in completion of the assignment for this unit.

The type of project chosen for the selected topic should allow for a sufficient degree of engagement with the different aspects of a project; ranging from research, analysis, production and communication. It is important to ensure that the assignment is based on the availability of sufficient background material and allows for the depth and breadth of study suitable for a level 4 qualification.

Guidance for tutors is available in the Pearson-set Assignment Guidance for Unit 1: Individual Project. This provides a range of assignment types and examples that could be utilised for the unit. The assignment types provided are not exhaustive or mandatory and we encourage tutors to be innovative with their ideas.

Please note that if reasonable adjustments are necessary to meet an individual students' needs_you are able to adjust internal assessment to take this into account. Any adjustments must be considered with regard to the centre's policies on equality & diversity and student support.

1.4 Evidence / Outcomes

It is important to recognise that project work is reliant on gathering information/data that can be analysed, used in the production of work and underpin the method of communication that the student will use to present their work. The assignment brief must allow time for suitable research (primary and/or secondary), development and communication. Where the project may lead to design propositions or forms of graphical evidence (eg. construction information, technical drawings, etc.), the students' graphical evidence should be clearly based on the outcomes of their research.

In assessing the project, the assessor should be able to see:

- how project objectives have been met;
- how students have explored the research material relevant to the project;
- how students have developed and formulated their outcomes;
- how students have managed and documented their process;
- what the student has learned in undertaking the project.

An important part of the unit is for students to develop an awareness of the process and management of a project. A project report may be a key document that the student can produce; documenting their process and management approach. Well edited, focused writing and presentation; where the key decisions, developments, lines of argument and salient research are explained succinctly, is preferable to unstructured writing and presentation; where little attempt to select or edit material has been made.

It is important to recognise that there are many different presentation formats and it is necessary for students think carefully about the suitability of their presentation approach for their target audience. Their presentations should be appropriate to the audience, both in terms of the nature and level of material they use and in terms of length. Students should be guided to produce presentations that give a succinct account of the main arguments or developments from their project. The question and answer session should address issues raised by the presentation, but also give students an opportunity to review their work.

While Pearson encourages centres to devise an assignment that is specifically related to the subject of the qualification; being as creative as possible with the forms of evidence that students may produce, there is also a need to ensure that students are planning and monitoring their own progress. To facilitate this, Pearson encourages centres to consider the following, as part of the assignment:

- A Project Plan, undertaken at the start of the assignment, provides a format for students to record their aims and goals for the assignment. Tutors may use the Project Plan as a means of supporting the student to identify the specific resources, timelines, and stages required for the project.
- **A Log Book** offers a means to evidence the project development process and ongoing reflection. It should provide evidence that the student has thought about the direction of their project, what challenges they may have encountered and steps taken to address them.
- **A Performance Review**, completed at the end of the project, allows students to record the reflection and evaluation of their own learning through the project and to consider their individual performance.

Depending on the qualification, some of the above may be required within the assessment criteria for the unit. Centres must ensure that their assignment brief for the Pearson-set unit makes clear whether any of the above are required forms of assessment evidence. However, centres may use their discretion to define the specific format in whatever way they deem appropriate.

Within the Pearson-set Guidance for Unit 1, there are example templates for the above. However, centres are encouraged to consider other approaches to the evidence that may be utilised for the project. For example, rather than produce written reports for the above, a centre may seek to integrate the bodies of evidence (suggested above) within presentations, videos, blogs or other forms of communication.

1.5 Employer engagement

It is advisable that centres look at the Pearson-set Assignment as an opportunity to embed employer engagement, although this is not a mandatory requirement. Developing and establishing links with employers enhances the teaching and learning experience and improves students' employability. Where possible, identifying links with employers as part of the delivery of the Pearson- set Assignment

could lead to enhancing and supporting student learning. Real-life projects provide students with the opportunity to develop and acquire appropriate skills, knowledge and expertise required by employers.

1.6 Sharing of good practice

An appointed External Examiner (EE) for the centre will ask to sample the Pearson -set assignment briefs for review as part of the remote sampling request. Although this is not a mandatory requirement for centres we strongly advise that centres seek guidance and support from their EE on the Pearson-set assignment. The EE may also include the Pearson-set units in the centre visit sample of student work.

The EE will review and identify exemplars in all aspects of good practice. Good practice will focus on current themes that align to QAA Higher Education Reviews:

- Innovation
- Digital literacy
- Student employability and entrepreneurial skills
- Employer engagement
- Quality of assessment feedback

1.7 Resources and useful links

Suggested resources and links that centres may find useful are shown below. Centres should choose those resources that are relevant for localised use and complement those with additional resources to support independent research in the chosen topic and project type.

Type of Resource	Resource Titles	Links		
Useful resources for underlying principles, examples of published reports on Construction activities				
Book	Revere, J. Construction Risk: A Guide to the Identification and Mitigation of Construction Risks, AuthorHouse, 2003.			
Book	Smith, N., Merna, T., Jobling, P. <i>Managing Risk in Construction Projects</i> , Wiley-Blackwell, 2014.			
Book	Burtonshaw-Gunn, S. <i>Risk and Financial Management in Construction.</i> Routledge, 2016.			

Type of Resource	Resource Titles	Links
Website	Health and Safety in the Construction Industry - Health and Safety Executive	https://goo.gl/LyOT67
Website	Risk Management	https://goo.gl/eiaxWB
Presentation	Managing Risk in construction projects - PriceWaterhouseCooper	https://goo.gl/8UFscQ
Fact Sheet	Risk Management	https://goo.gl/Kf3dSt
Website	The Ultimate Guide to Construction Risk Management	https://goo.gl/GH5KQm
Case Study	BAM – Case Studies	http://sustainability.bam.co.u k/case-studies

The Pearson-set Assignment Guidance for Unit 1: Individual Project should be read in conjunction with the theme and topic release. It provides advice and guidance for both tutors and students.

For any further additional support or queries regarding this document, please email btecdelivery@pearson.com.